

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of transmission of data messages between a plurality of stations interconnected by a bus line, wherein each said message includes a frame portion representing content and priority information of the data message and a data portion representing data to be transmitted, the method comprising the steps of causing at least one of said station plurality of stations to transmit a data message on to the bus line such that said frame portion thereof is transmitted at a first data transmission rate, and the data portion thereof is transmitted at a second data transmission rate not less than said first data transmission rate, and adjusting at least one of said first data transmission rate and/or and said second data transmission rate in dependence on a signal quality determined for transmission on said bus line.
2. (Currently amended) A method according to claim 1, further comprising the step of causing at least one further station to transmit onto the bus line, an ~~acknowledgement~~ acknowledgment signal indicating receipt of a said data message.
3. (Currently amended) A method according to claim 2, further comprising the step of causing at least one said station to transmit a further said data message in response to transmission of a said ~~acknowledgement~~ acknowledgment signal.

4. (Currently amended) A method according to claim 2 ~~or 3~~, further comprising the step of retransmitting a said message if no ~~acknowledgement~~ acknowledgment signal is received.
5. (Original) A method according to claim 4, further comprising the step of generating an error message prior to re-transmission of said message.
6. (Currently amended) A method according to claim 5, further comprising the step of adjusting at least one of said first data transmission rate ~~and/or~~ and said second data transmission rate in dependence on the frequency of generation of said error messages.
7. (Currently amended) A method according to claim 1, further comprising the step of determining the frequency of received data messages comprising an error and adjusting at least one of said first data transmission rate ~~and/or~~ and said second data transmission rate in dependence on the frequency of received data messages comprising an error.
8. (Currently amended) A method according to claim 7, further comprising determining received signal strength for a data message and adjusting at least one of said first data transmission rate ~~and/or~~ and said second data transmission rate in dependence on said received signal strength determination in combination with said frequency of received data messages comprising an error.
9. (Currently Amended) A method according to ~~any one of the preceding claims~~ claim 1, wherein said frame portion contains information representing a station to which the message is directed.
10. (Currently Amended) A method according to ~~any one of the preceding claims~~ claim 1,

wherein the frame portion contains information representing the size of the corresponding data portion.

11. (Currently Amended) A method according to ~~any one of the preceding claims~~ claim 1, wherein the second data transmission rate is an integral multiple of said first data transmission rate.

12. (Currently Amended) A method ~~of transmission of data messages between a plurality of stations interconnected by a bus line, the method substantially as hereinbefore described with reference to Figures 4 and 5 of the accompanying drawings~~ wherein the frame portion contains information representing the transmit node identification.

13. (Currently amended) Apparatus for transmitting data messages between a plurality of stations interconnected by a bus line, each of said data messages including a frame portion representing content and priority information of the data message and a data portion representing data to be transmitted, the apparatus comprising:

means for transmitting a data message on said bus line such that said frame portion thereof is transmitted at a first data transmission rate, and said data portion thereof is transmitted at a second data transmission rate not less than said first data transmission rate; and

means for adjusting at least one of said first data transmission rate ~~and/or~~ and said second data transmission rate in dependence on a signal quality determined for transmission on said bus line.

14. (Currently amended) Apparatus according to claim 13, further comprising means responsive to receiving a data message to transmit an ~~acknowledgement~~ acknowledgment signal on said bus line.
15. (Currently amended) Apparatus according to claim 13 ~~or 14~~, further comprising means responsive to an ~~acknowledgement~~ acknowledgment signal to transmit a further said data message.
16. (Currently Amended) Apparatus according to ~~any one of claims 13 to 15~~ claim 14, further comprising means for re-transmitting a message if no acknowledgement signal is received.
17. (Original) Apparatus according to claim 16, further comprising means for generating an error message prior to re-transmission of said message.
18. (Currently amended) Apparatus according to claim 17, further comprising means for adjusting at least one of said first data transmission rate ~~and/or~~ and said second data transmission rate in dependence on the frequency of generation of said error message.
19. (Original) Apparatus according to claim 13, further comprising means for determining whether a data message comprises an error.
20. (Original) Apparatus according to claim 19, said means for determining whether a data message comprises an error including a Cyclic Redundancy Checker.
21. (Original) Apparatus according to claim 20, further comprising an error register for holding a value indicative of the level of received messages comprising an error, and means for decrementing said value for a received data message determined not to comprise an error and incrementing said

value for a received data message determined to comprise an error.

22. (Currently amended) Apparatus according to claim 13 ~~or any one of claims 19 to 21~~, further comprising a received signal strength measurement unit for measuring signal strength of a received data message.

23. (Original) Apparatus according to claim 22, further comprising a signal strength register for holding a value representative of received signal strength.

24. (Currently amended) Apparatus according to claim 21, further comprising processing means for adjusting at least one of said first data transmission rate ~~and/or~~ and said second data transmission rate in dependence on the content of said error register.

25. (Currently amended) Apparatus according to claim 23, further comprising processing means for adjusting at least one of said first data transmission rate ~~and/or~~ and said second data transmission rate in dependence on the content of said signal strength register.

26. (Currently amended) Apparatus according to claim ~~25 and 24~~ 13, further comprising:
means for determining whether a data message comprises an error;
an error register for holding a value indicative of the level of received messages comprising an error;
a received signal strength measurement unit of measuring signal strength of a received data message;
a signal strength register for holding a value representative of received signal strength; and
~~said~~ processing means configured to adjust ~~at least one of~~ said first data transmission rate ~~and/or~~ and
said second data transmission rate in dependence on the content of said signal strength register.

27. (Currently amended) Apparatus according to ~~any one of claims 13 to 26~~ claim 13, wherein said frame portion contains information representing a station to which the message is directed.
28. (Currently amended) Apparatus according to ~~any one of claims 13 to 26~~ claim 13, wherein the frame portion contains information representing the size of a corresponding data portion.
29. (Currently amended) Apparatus according to ~~any one of claims 13 to 26~~ claim 13, wherein the second data transmission rate is an integral multiple of said first transmission rate.
30. (Currently Amended) Apparatus ~~for transmitting data messages between a plurality of stations interconnected by a bus line, the apparatus substantially as hereinbefore described with reference to Figures 6 and 7 of the accompanying drawings~~ according to claim 13, wherein the frame portion contains information regarding the transmit node identification.
31. (Currently amended) A method according to claim 1, wherein the method is executed by at least one processor configured for operation under control of instructions embodying computer program means ~~comprising computer program means for configuring a processor to operate in accordance with any one of claims 1 to 12.~~
32. (Currently amended) A method according to claim 31, wherein said computer program means comprises a portion of a computer program carrier medium, comprising a computer program according to claim 31.
33. (Currently amended) A method according to claim 32, wherein said computer program carrier medium according to claim 32, comprising comprises one of a magnetic storage medium,

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optical storage medium, solid state storage medium or communications carrier medium.